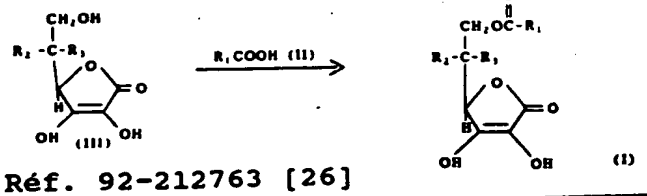
J04141093
MITSUBISHI RAYON CO LTD Pr. 90JP-263718 du 901003

Organic a id ester prepn. - by eacting with di:hydr xy:furan ne cpd. c ntg. di l gp. in organic solv nt f rming az otropic mixt. with wat r in presenc f st r hydr las

Prepn. of an ascorbic or erythorbic acid organic acid ester of formula (I) comprises reacting organic acid (II) with cpd. (III) in an organic solvent which forms azeotropic mixture with water, in presence of ester-hydrolase while evaporating the organic solvent continuously or intermittently.



Réf. 92-212763 [26]

R_1 = hydrocarbon;
one of R_2 and R_3 = H and the other = OH.

USE/ADVANTAGE

(I) show strong reducing activity, and have been used as oil-soluble antioxidants for foods, cosmetics, etc.

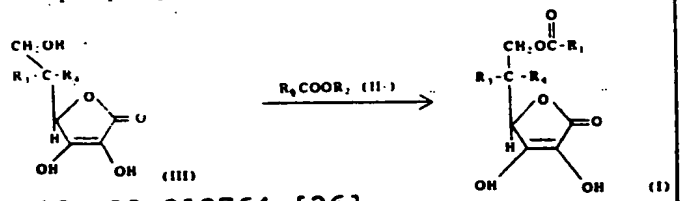
When esterification is effected using hydrolase, water is formed and with increasing water content in the reaction mixt. esterification velocity is markedly decreased. By using azeotropic water removal esterification can be carried out efficiently under mild conditions without requiring a reactor, etc. made from specific material.

J04141094
MITSUBISHI RAYON CO LTD Pr. 90JP-263719 du 901003

Organic acid ester prepn. - involves using mixt. of ester hydrolase and phospholipid as catalyst

Prepn. of an ascorbic or erythorbic acid organic acid ester of formula (I) comprises reacting ester (II) with cpd. (III) in an organic solvent in presence of an ester hydrolase.

The novelty comprises using a mixt. of ester hydrolase and phospholipid as the catalyst.



Réf. 92-212764 [26]

R_1 = hydrocarbon;
R_2 = H or lower alkyl;
one of R_3 and R_4 = H or OH and the other = OH.

USE/ADVANTAGE

(I) show strong reducing activity, and have been used as oil-soluble antioxidants for foods, cosmetics, etc.

By using a mixt. of ester hydrolase and phospholipid (e.g. phosphatidylcholine, phosphatidylserine, phosphatidylethanolamine), the enzymic activity can be increased. Esterification can thus be effected efficiently under mild conditions without requiring a reactor, etc. made from specific material. (4pp

J04142305
MITSUI PETROCHEM IND CO LTD Pr. 90JP-265526 du 901002

Polyolefin wax particle prepn. - comprising depolymerisation of polyolefin particles in presence of peracid in oxidative atmos., used for lubricant, tackifier, ink, etc.

Preparation of wax particles (I) comprises heating a mixt. (II) contg. poly 3-20C alpha-olefin particles (III) and organic peracid(s) (IV) below m.pt. of (III) an in O2-contg. atmos.

Particles of homopolymer of propylene, 4-methylpentene-1 or butene-1 or copolymer of them is used as pref. (III). (III) is prepd. by (co)polymerisation of alpha-olefin(s) by known process. Pref. particle size, appearant bulk density, geometric standard deviation of particle size of (III) is 300-3,000 microns, 0.35-0.60g/cm3, 1.0-1.3, respectively.

(IV) (e.g. dichlorobenzoyl peroxide, dicumyl peroxide, etc.) is pref. dissolved in organic solvent. The soln. is added to (III) to become (IV)/(III) to 0.01-0.2(w/w). (IV)-contg. (III) is heated at 50-140 deg. C (pref. 60-120 deg. C) in O2-contg. gas (usually air) atmos. for 0.5-1.5 hrs. to obtain (I) with intrinsic viscosity of 0.2-1.0dl/g.

USE/ADVANTAGE - (I) is useful as plasticiser, pigment dispersing agent for plastic, insulating material, lubricant, tackifier, cosmetic base, casting lubricant, fluidity additive, modifier for printing ink, etc. (I) is prepd. from (III) by a simple procedure. The particle size, geometric standard deviation of particle size, appearant and bulk density of (I) nearly equal to these of (II). (8pp